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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/994,769	11/28/2001	Susumu Endo	1359.1058	8632

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STAAS & HALSEY LLP  
SUITE 700  
1201 NEW YORK AVENUE, N.W.  
WASHINGTON, DC 20005

EXAMINER
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ALABAIDI, HAYTHIM J

ART UNIT	PAPER NUMBER
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2171

DATE MAILED: 05/14/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/994,769

Applicant(s)

ENDO ET AL.

Examiner

Haythim J. Alaubaidi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 25 February 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,4-6 and 8-14 is/are rejected.
- 7) ☒ Claim(s) 2,3 and 7 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

1. This communication is in response to the amendment filed on February 25, 2004.
2. Claims 1-14 are presented for examination following the amendment, of which Claims 1, 10 and 11 are independent claims.
3. The Examiner acknowledges the new added Claims 12-13.
4. Claims 1, 4-6 and 8-14, are rejected under 35 U.S.C. 102(b).
5. Claims 2-3 and 7, are objected to as being dependent upon a rejected base claim.

***Priority***

6. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. 09/994,769, filed on November 28, 2001. The Applicant was accorded the benefit of the earlier filing date of May 14, 2001.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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8. Claims 1, 4-6 and 8-14, are rejected under 35 U.S.C. 102(b) as being anticipated by Katherine Wang (U.S. Patent No. 5,802,361 and Wang hereinafter).

Regarding Claims 1 and 10-11, Wang discloses  
a data retrieving part retrieving data (Fig 2a, Element 211)  
a classifying and arranging part (the ranking of each image) for classifying and  
arranging data (image) in the data retrieving part on a display screen (Once the ranked  
images are displayed ) in accordance with feature values (according to the ranking of  
the selected image attributes) (Col 2, Lines 33-40; see also Col 8, Lines 40-47; see also  
Col 5, Lines 35-51), i.e.

During retrieval, the ranking of each image according to the  
ranking of the selected image attributes in the search inquiry  
is determined, and the images analyzed and displayed  
according to their rankings in either a spatial order, such as  
a grid layout, or a temporal order, one after another. Once  
the ranked images are displayed, the user can specify which  
images are satisfactory matches for the search inquiry and  
which are not, whereupon a correlation between the image  
attributes in the search inquiry and the designated images is  
determined, the ranking for the image attribute readjusted  
according to their individual correlations, and the search  
repeated with the new rankings. This adaptive process will  
allow the user to quickly identify the desired image or  
images. The user may again search the images for image  
attributes whose parameters have been reset to match the  
image attributes of the images indicated by the user as being  
satisfactory or best matches

a ground information<sup>1</sup> providing part (side information) providing each data (image) with ground information visualizing grounds (Figures 5d-5i, 7-8 and 12 and corresponding text) for the classification and the arrangement of the data; and (Col 4, Lines 63 through Col 5, Line 25; see also Col 5, Lines 35-38, i.e. ranking; see also (Col 8, Lines 48-51), i.e.

Once the search inquiry is constructed 205, the high level analyzer 123 parses 207 the search inquiry to determine the image attribute included therein, and the order in which the corresponding side information files 115 are to be analyzed.

(Col 24, Lines 64-67), i.e.

After the high level analyzer 123 evaluates 209 the appropriate side information files 115 from the image database 113, and determines the ordering of those images that are substantially similar to the image attributes in the search inquiry.

a display part displaying each data together with corresponding ground information (Figures 5b-5h, 5i and 7-8)<sup>2</sup> in accordance with classification and the arrangement of the data (Col 25, Lines 1-3; see also Col 8, Lines 54-66).

Regarding Claims 4, Wang discloses wherein the classifying and arranging part conducts self-organization mapping processing in classification and arrangement processing of data so that data having similar feature values are disposed close to each

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<sup>1</sup> The "ground information" can read on the "side information" in accordance to the Application specification, please see the Summery of the Invention, Page 3, Lines 20-22.

The "ground information" can also read on the "image attribute" and how it is visual to the user through the Interface and also and how it is ranked (classified).

<sup>2</sup> Please refer to the "image attribute" interpretation above (in the first footnote), and how it can read on the "ground information", please note that this interpretation was mentioned in the first non-final office action of November 26, 2003.

other (Abstract, i.e. and analyzes the image data of the side information files to determine a similarity measure for each image with respect to the search inquiry; see also Col 24, Lines 55-62; see also Col 24, Line 64 through Col 25, Line 3, i.e. such as pointers or storage addresses of the images (mapping); see also Col 6, Lines 22-35, i.e. A high level analyzer analyzes the search inquiry to determine the image attributes and their parameters contained therein, and then analyzes the image data of the images to determine how similar the image data of an image is to the image attributes, to retrieve the images that are substantially similar to the image attributes of the search inquiry).

Regarding Claim 6, Wang discloses wherein the label information<sup>3</sup>, the information on the feature values is color information, and the distribution information on the feature values is color histogram information (Col 3, Lines 44-52; see also Col 4, Lines 19-39; see also Col 11, Lines 32-36), i.e.

A color histogram side information file includes a color histogram of each image, either still images or those that are part of video sequences. In the preferred embodiment, the color histogram is based on an HSV color space, and represents the frequency distribution of colors by their hue and saturation levels in the image, with brightness values discarded.

Regarding Claim 8, Wang discloses wherein the data is image data, and in the label information, information on the feature values is edge information in image data,

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<sup>3</sup> Please note that the "label information" is being interpreted as "color information" or "color space" according to the Specification of the instant Application (please see Page 4, Lines 11-12).

and distribution information on the feature values is histogram information including a direction of an edge portion in the image data as an element (Col 10, Line 66 through Col 11, Line 17).

Regarding Claim 9, Wang discloses wherein the data is image data, and in the label information, the information on feature values is color information, and distribution information on the feature values is representative color information (Figure No. 5d; see also Col 3, Lines 53 through Col 4, Line 3).

Regarding Claims 12-14, the limitations of these claims are similar in scope to the rejected claim 1, above. They are therefore rejected as set forth above.

***Allowable Subject Matter***

9. Claims 2-3 and 7, are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. The following is the Examiner's statement of reasons for the indication of allowable subject matter:

Regarding Claims 2 and 3, Applicant's particular system in the environment of data searching is the combination of wherein the data retrieving part receives the ground information displayed on the display part or a part of the ground information, or information obtained by altering a part of the ground information, and conducting subsequent search processing in combination with the feature of wherein the classifying and arranging part conduct self-organization mapping process in the classification and

arrangement of the data so that the data having similar feature values are disposed close to each other in combination with the other limitations of the claims, was not disclosed by, would not have been obvious over, nor would have been fairly suggested by the prior art of record or that encountered in searching of the prior art.

Regarding Claim 7, Applicant's particular system in the environment of data searching is the feature wherein the data is image data, and in the label information, the information on feature values is information on wavelet conversion feature values, and the distribution information on the feature values is distribution information on frequency components of the image data subjected to wavelet conversion in combination with the limitations of Claims 5 and 1, was not disclosed by, would not have been obvious over, nor would have been fairly suggested by the prior art of record or that encountered in searching of the prior art.

### ***Response to Arguments***

11. Applicant's arguments filed February 25, 2004 have been fully considered but they are not persuasive.

Applicant argues that Wang's reference does not teach the third limitation of Claim 1, above (a ground information providing part...). The Examiner however disagrees. Wang teaches a ground information<sup>4</sup> providing part (side information)

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<sup>4</sup> The "ground information" can read on the "side information" in accordance to the Application specification, please see the Summary of the Invention, Page 3, Lines 20-22. The "ground information" can also read on the "image attribute" and how it is visual to the user through the Interface and also and how it is ranked (classified).



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providing each data (image) with ground information visualizing grounds (Figures 5d-5i, 7-8 and 12 and corresponding text) for the classification and the arrangement of the data; and (Wang, Col 4, Lines 63 through Col 5, Line 25; see also Col 5, Lines 35-38, i.e. ranking; see also Col 8, Lines 48-51), i.e.

Once the search inquiry is constructed 205, the high level analyzer 123 parses 207 the search inquiry to determine the image attribute included therein, and the order in which the corresponding side information files 115 are to be analyzed.

(Col 24, Lines 64-67), i.e.

After the high level analyzer 123 evaluates 209 the appropriate side information files 115 from the image database 113, and determines the ordering of those images that are substantially similar to the image attributes in the search inquiry.

Applicant argues that Wang's reference does not teach the forth and final limitation of Claim 1, above (a display part displaying each data...). The Examiner however disagrees. Wang teaches a display part displaying each data together with corresponding ground information (Figures 5b-5h, 5i and 7-8)<sup>5</sup> in accordance with classification and the arrangement of the data (Col 25, Lines 1-3; see also Col 8, Lines 54-66).

Applicant argues that the Examiner took an Official Notice in regard to the feature of "displaying each data together with corresponding ground information". The Examiner however disagrees. The Examiner did not take any Official Notice in regard

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<sup>5</sup> Please refer to the "image attribute" interpretation above (in the first footnote), and how it can read on the "ground information", please note that this interpretation was mentioned in the first non-final office action of November 26, 2003.

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to any feature of any claimed limitation during the examination of the instant application.

The Examiner did however stated in the previous Office Action of November 26, 2003 an obvious modification to the Wang reference according to one ordinary skilled in the art, which by all means is not an Official Notice.

***Points of Contact***

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Haythim J. Alaubaidi whose telephone number is (703) 305-1950. The examiner can normally be reached on Monday - Friday from 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic, can be reached on (703) 308-1436.

Any response to this office action should be mailed to:


The Commissioner of Patents and Trademarks, Washington, D.C. 20231 or telefax at our fax number (703) 872-9306.

Hand-delivered response should be brought to Crystal Park II, 2121 Crystal Drive, 6<sup>th</sup> Floor Receptionist, Arlington, Virginia. 22202.

*Haythim J. Alaubaidi*

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Patent Examiner  
Technology Center 2100  
May 11, 2004

  
SAFET METJAHIC  
SUPERVISOR, PATENT EXAMINER  
TECHNOLOGY CENTER 2100